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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,927

02/01/2007

Erwin Bayer

13806/27

3852

26646

7590

03/04/2009

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

EVANS, GEOFFREY S

ART UNIT

PAPER NUMBER

3742

MAIL DATE

DELIVERY MODE

03/04/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,927	Applicant(s) BAYER ET AL.	
	Examiner Geoffrey S. Evans	Art Unit 3742	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 7-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 7-12 are not tied to another statutory class or transform underlying subject matter. The claims are directed to “checking” and do not require any particular machine or apparatus to perform the checking. Applicant is directed to the decision in In re Bilski, 88 USPQ 2d 1385 (Fed. Cir. 2008).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 7,8,12 are rejected under 35 U.S.C. 102(b) as being anticipated by Reiter et al. in U.S. Patent No. 5,166,891. Reiter et al. discloses shaping the bore holes in a workpiece by a laser beam that includes melting (see column 2, lines 24-25 where resolidification of molten metal is disclosed) and checking for deviation from a predefined bore hole geometry by using optical recording instrument 21. Claim 5 of Reiter et al. discloses that as least in one embodiment the images can be produced between successive laser pulses. Since claim 7 uses the open ended transition term “comprising”, claim 7 does not preclude the characteristic signals to be also received

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from a time period outside the characteristic time interval, therefore the limitations of claim 7 are met.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Reiter et al. in U.S. Patent No. 5,166,891 in view of Kleinhuber in WO 01/26589. Kleinhuber teaches using a CCD camera or CMOS camera (see page 11, lines ...) for taking images of a workpiece during laser processing. It would have been obvious to adapt Reiter et al. in view of Kleinhuber to provide a CCD camera or a CMOS camera to take images of the bore hole.

7. Applicant's arguments with respect to claims of record have been considered but are moot in view of the new ground(s) of rejection.

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kurosawa et al. in U.S. Patent No. 5,698,120 discloses detecting melting of part of the workpiece by a laser beam (see column 14, line 66 to column 16, line 16). Bizot et al. in U.S. Patent No. 4,608,480 uses converts sounds created by melting of the workpiece due to its contact with a laser beam into digital form to control laser drilling. Kleinhuber in U.S. patent no. 6,934,014 is of the same patent family as WO 2001/26859 and discloses laser drilling (see column 1, lines 17-18) and the equivalence of CMOS and CCD cameras (see column 6, lines 24-28). Kuriyama et al. in

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U.S. Patent No. 5,670,068 discloses using for illumination laser beam of the same wavelength as the machining laser beam to prevent chromatic aberration. Goslowsky et al. in DE 4,207,169 discloses measuring the distance between the laser and the workpiece between laser machining pulses.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey S. Evans whose telephone number is (571)-272-1174. The examiner can normally be reached on Mon-Fri 7:30AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tu Hoang can be reached on (571)-272-4780. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Geoffrey S Evans/

Primary Examiner, Art Unit 3742